# Author Index of Volume 71

Afacan, A., 251
Ahluwalia, S. C., 229
Atumi, K., 65

Baeyens, J., 71
Bai, D.-R., 51
Becker, H. A., 107
Bernis, A., 101, 263
Biń, A. K., 111
Boldo, P., 263

Chandrasekhar, R., 81
Contal, P., 101

Dendyuk, T. V., 47
Di Felice, R., 281

Eckhoff, R. K., 181

Font, R., 217
Foscolo, P. U., 281
Foster, J., 251

Geldart, D., 1, 71
Gogolek, P. E. G., 107
Gonthier, Y., 101, 263

Ishida, T., 239

Jimbo, G., 65
Jin, Y., 51

Kanno, Y., 59
Kauffman, C. W., 117
Kjäldman, L., 163
Knystautas, R., 153
Kuipers, J. A. M., 87

Lacour, G., 101
Lee, J. H. S., 153
Lemkowitz, S. M., 207

Marcilla, A. F., 217
Masliyah, J. H., 251
Meloy, T. P., 273, 289

Menard, G., 263
Moothedath, S. K., 229

Nakano, K., 59
Nasr-El-Din, H. A., 251
Nomura, S., 189

Preti, U., 289
Prins, W., 87

Rapagnà, S., 281
Rhodes, M. J., 1

Scarlett, B., 207
Sichel, M., 119

Takeshita, T., 65
Tamanini, F., 135
Tammes, H., 87
Tanaka, T., 189, 239
Tsuji, Y., 239

Uchida, S., 65
Ural. E. A., 135

Van der Wel, P. G. J., 207
van Swaaij, W. P. M., 87
van Veen, J. P. W., 207
van Wingerden, C. J. M., 207
Vendel, J., 263
Veyssière, B., 171

Williams, M. C., 273
Wolanski, P., 119, 197
Wu, S. Y., 71

Yamazaki, R., 65
Yu, Z.-Q., 51

Zhang, F., 153
Zhu, J.-X., 51
Zoffmann, C., 217

# Subject Index of Volume 71

Aeration rate
effect of, on flow rate of granular materials from hopper attaching a standpipe, 65
Axial distribution
of the cross-sectionally averaged voidage in fast fluidized beds, 51

CMI
research at: influence of initial and explosion-induced turbulence on dust explosions in closed and vented vessels, 181
Coarse particles
calculation of expansion of bubbling fluidized bed of, 107
Cohesionless particles
Lagrangian numerical simulation of plug flow of, in horizontal pipe, 239
Combustion waves
propagation mechanisms of, in dust–air mixtures, 153
Current world-wide research
survey of, in gas fluidization (Jan. 1989–Dec. 1991), 1

Dust–air mixtures
propagation mechanisms of combustion waves in, 153
Dust deflagrations
numerical flow simulation of, 163
Dust explosions
development and propagation regimes of, 171
FMRC studies of parameters affecting propagation of, 135
influence of initial and explosion-induced turbulence on, in closed and vented vessels: research at CMI, 181
interpretation of dust explosion phenomena on basis of time scales, 207
research in Poland, 197
research on, at University of Michigan, 119
theoretical analysis of, 189
Dynamic similarity rules
validity check for bubbling and slugging fluidized beds, 281

Electrical properties
surface, of different polymer coated powders, 81
Electron microscopic studies
and X-ray diffraction studies on fine structure of ground $\beta$-SiC powders, 59
Elutriation
of fines from gas fluidized beds of Geldart A-type powders – effect of adding superfines, 71

Filtration
tangential, of gases: formation of deposit, 263
Fine structure
electron microscopic and X-ray diffraction studies on, of ground $\beta$-SiC powders, 59
Flotation
new reagent systems for, of low-grade Mn products of combined beneficiation, 47
Flow rate
effect of aeration rate on, of granular materials from hopper attaching a standpipe, 65
Fluidization
gas, (Jan. 1989–Dec. 1991); survey of current world-wide research in, 1
Fluidization velocity
minimum, at different conditioning, 111
Fluidized bed(s)
bubbling: calculation of expansion of, of coarse particles, 107
bubbling and slugging: validity check for: dynamic similarity rules, 281
fast: axial distribution of the cross-sectionally averaged voidage in, 51
gas; elutriation of fines from, of Geldart A-type powders – effect of adding superfines, 71
gas–solid, stabilized magnetically by permanent magnets, 101
two-dimensional gas; experimental and theoretical porosity profiles in, with central jet, 87
FMRC studies
of parameters affecting propagation of dust explosions, 135

Geldart A-type powders
elutriation of fines from gas fluidized beds of: effect of adding superfines, 71
Granular materials
effect of aeration rate on flow rate of, from hopper attaching a standpipe, 65
Grinding aids
mechanism of action of, in comminution, 229

Lagrangian numerical simulation
of plug flow of cohesionless particles in horizontal pipe, 239
Locked particles
three phase volume frequency distribution, 289

Manganese
new reagent systems for flotation of low-grade Mn products of combined beneficiation, 47
Metal hydroxide suspensions
application to deduce some parameters of aggregates in; sedimentation batch test, 217

Numerical flow simulation
of dust deflagrations, 163

Permanent magnets
gas–solid fluidized bed stabilized magnetically by, 101
Plug flow
Lagrangian numerical simulation of, of cohesionless particles in horizontal pipe, 239
Poland
dust explosion research in, 197
Polymer coated powders
surface electrical properties of different, 81
Population balance modelling
problems in, of wet grinding, 273
Porosity profiles
experimental and theoretical, in two-dimensional gas-fluidized bed with central jet, 87

Reagent systems
new, for flotation of low-grade Mn products of combined beneficiation, 47
Rotary drums
horizontal: slurry transport in, with end-constriction, 251

Sedimentation batch test
application to deduce some parameters of aggregates in metal hydroxide suspensions, 217
Silicon
electron microscopic and X-ray diffraction studies on fine structure of ground $\beta$-SiC powders, 59
Slurry transport
in horizontal rotary drums with end-constriction, 251
Surface electrical properties
of different polymer coated powders, 81
Suspensions
metal hydroxide: application to deduce some parameters of aggregates in; sedimentation batch test, 217

Tangential filtration
of gases: formation of deposit, 263
Turbulence
initial and explosion-induced, on dust explosions in closed and vented vessels: influence of; research at CMI, 181

University of Michigan
research on dust explosions at, 119

Voidage
axial distribution of the cross-sectionally averaged voidage in fast fluidized beds, 51
Volume frequency distribution
three phase; locked particles, 289

Wet grinding
problems in population balance modelling of, 273

X-ray diffraction
and electron microscopic studies on fine structure of ground $\beta$-SiC powders, 59